REMARKS

The present amendment is prepared in accordance with the new revised requirements of 37 C.F.R. § 1.121. A complete listing of all the claims in the application is shown above showing the status of each claim. For current amendments, inserted material is underlined and deleted material has a line therethrough.

Applicants appreciate the thoroughness with which the Examiner has examined the above-identified application. Reconsideration is requested in view of the amendments above and the remarks below.

Claim objections

Rejection under 35 USC § 112, second paragraph

Claims 11 and 32 were rejected under 35 USC § 112, second paragraph for lack of an antecedent basis for "the white noise signal." Upon inspection, it became apparent that these dependent claims were inadvertently written to be dependent on the wrong parent claims. The claim dependencies have been amended to correct this error.

Rejection under 35 USC § 103

Claims 1, 16, 17, and 22 stand rejected under 35 USC § 103 as being obvious from Wilker '145. Applicant respectfully traverses this rejection on the following grounds:

First, Wilker does not teach **what** should be said in the voice signal (claim 1 - "the voice signal indicating in words that the source of the voice signal is an exit"). It is critical for the voice signal to state that the source of the voice is an exit.

Second, Wilker fails to teach that the recorded voice signal must be stored locally (claim 1 - "control circuit mounted in the fire exit door hardware case, the control circuit including ... a storage element for storing a voice signal"). Wilker always refers to "relaying" the recorded voice signal from the remote device 150 or the local microphone. Relying on a remote device and relaying over the antennas or modem is less reliable than the claimed design with local voice storage.

More specifically, claim 1 includes "a control circuit mounted in the fire exit door hardware case." The "control circuit" in the case must include "a storage element for storing a voice signal" and "the voice signal [must indicate] in words that the source of the voice signal is an exit."

Wilker does not disclose this claimed device. Wilker describes his 'audible indicator" system at col. 4, lines 11-17 (see also col. 6 lines 31-37 for identical wording) as follows: "Audible indicator may ... emit any distinctive sound, such as a buzzer, chirp, chime or the like. Alternatively, the audible indicator may be a speaker that **relays** any audible communication information, such [as] a recorded message, a **relayed** communication message, a **relayed** live transmission, or the like" (emphasis added). In each case, the voice message is a "relayed" message, not a locally stored message as in the present design. The "relaying" refers to relaying from antenna 158 on the "remote device 150" to the antenna 140 on the safety system 100 (see Fig. 2) or the modem.

The Examiner indicates that the "data' storage for Wilker's CPU might be data corresponding to a voice signal, but nowhere is that statement made by Wilker. Wilker refers only to a "recorded message" that is "relayed" to the speaker. Alternatively, the voice signal may come from the microphone 128 on the safety system. A live message from a microphone is even less reliable than a recorded message.

There is no guarantee that the live speaker will repeatedly tell the public that the source of his "relayed" voice is an exit. It is one thing to say "There is a fire - Exit now." It is quite another to say "There is a fire - Exit through the door located at the sound of my voice." The former is effectively what the prior art signals and alarms accomplish. The public knows they should exit, but is unsure where or how. The latter is what is reliably achieved by the present invention. The public is automatically told that the source of the voice is an exit to escape from the danger.

Although the Wilker system is intended to aid in locating the points of egress, it does so by making noise (buzzers etc.), making light (strobe light, etc) and by making smells. All of these methods follow the prior art in that they require the public to assume or know in advance that the origin of the sound is actually the same as the location of the exit. The present invention does not require the public to know or assume that fact. The audible signal is specifically a voice signal that "indicat[es] in words that the source of the voice signal is an exit."

Even if it is believed that the audible recorded signal in Wilker is stored locally, it is improper hindsight reconstruction to assume that the voice signal will "indicat[e] in words that the source of the voice signal is an exit." That is exactly the missing element of the prior art that is claimed in the present claims. Nowhere in Wilker is there any

indication or suggestion that the voice signal tells the public that the origin of the audible voice signal is an exit!

Accordingly, the applicant most emphatically disagrees with the Examiner's statement that it "would have been obvious to have the prerecorded messages indicate that the source of the voice signal is an exit." Even if the Examiner believes that Wilker teaches a recorded voice signal stored locally and not "relayed" from the remote device, it is improper to assume as obvious the critical content of the voice signal. It is this content that allows the public to learn of the location of the exit. Otherwise, the public may think that the buzzers or lights are simply general alerts about the existence of the fire.

The present invention is specifically intended to address the problem that the public will usually try to exit through the same door used to enter the public space. This tendency has resulted in many deaths because entrances are often more restricted or limited than exits because entrances must be designed to prevent patrons from entering without authorization. The requirement of fire codes to have multiple additional exits is ineffective if the public does not use those exits. The present invention is designed to ensure that the public learns **where** the additional exits are located at the time of the fire - when they need to use those exits. As claimed, the invention specifically ensures that the required voice signal will be stored locally and automatically transmitted in the emergency.

Claims 2-4, and 23-25 stand rejected under 35 USC § 103 as being obvious from Wilker '145 in view of Haus '084. Applicant respectfully traverses this rejection as well. Haus teaches the coordination of light and sound. However, it does not teach the coordination of **voice** and sound. More specifically, Haus does not suggest a

"control circuit [that] coordinates the repeated voice signal and the light source by flashing the light source when the voice signal is indicating that the source of the voice signal is an exit." This is the same element omitted from the teaching of Wilker. The light source is preferably flashed on the word "HERE" when the voice signal states: "Exit **HERE**" or something equivalent. This light source coordination assists in getting the message to the public at the time the voice signal is being sent stating that the exit is located at the point where the sound and the light are being emitted.

Prior art fire exits might well have both a light and a sound, and they might well coordinate the light and sound, but coordination is not enough. The public is likely to believe that the flashing light and sound simply warn of the danger of a fire, and do not necessarily indicate that the exit can be found at the source of the flashing light and sound. Coordination of a generic light and sound adds nothing to the message. Many fire alarms will not be located at an exit.

In contrast, by emitting a flash of light on the word "HERE" or other voice signal indicating that the source of the voice signal is an exit, the public is receiving information not relayed by mere coordination of light and sound as taught by Haus.

Claims 10 and 31 stand rejected under 35 USC § 103 as being obvious from Wilker '145 in view of Potter '485. Applicant respectfully traverses this rejection. Potter fails to disclose the claimed "white noise signal generator." A "white noise signal generator" is one that produces sound of all frequencies and where the amplitude of each frequency is substantially the same as each other frequency.

Fig. 2 of Potter clearly shows that the frequencies labeled "subharmonics," "resonant f" and "overtones" all have much higher amplitude than the other frequencies. A white noise signal generator will have much more uniform amplitudes

and will approximate a horizontal line in a frequency graph of the type seen in Fig. 2 of Potter. Moreover, Potter fails to disclose the reason that the white noise signal generator is used in the present design. Potter uses non-white noise having specific characteristics to alert security personal who are specially trained to listen for the sound.

The applicants of the present invention use white noise because white noise is more easily directionally located. White noise allows the public to more easily identify the location of the sound, and it is the direction of the sound that guides the public to the exit in smoke-filled or darkened rooms, as may be found in a fire emergency.

Claims 12 and 13 stand rejected under 35 USC § 103 as being obvious from Wilker '145 in view of Hunt '017. Applicant respectfully traverses this rejection, as well. Applicant is the first to combine the sound, light and voice elements of the claimed invention with the alarm sensors in an "exit device" and/or a "door closer." An "exit device" is commonly used on fire doors, and by combining the fire alarm system of this invention with an exit device, an integrated package of lower cost and greater reliability can be produced. It is respectfully submitted that the Examiner is engaging in hindsight reconstruction to state that this combination is "obvious" in the absence of any suggestion in the references to make the applicants' combination. Similarly, the art fails to show a door closer having the combined features of the present invention.

Claims 6 and 20 stand rejected under 35 USC § 103 as being obvious from Wilker '145 in view of Watanabe '301 and other references. Claims 6 and 20 specify that "the laser produces a cone having an apex at the fire exit alert system to provide a visual direction guide towards the fire exit alert system." This cone is shaped like an the point of an arrow with the point or "apex" of the cone pointing towards the exit.

Watanabe, however, does the reverse. It produces a cone having the apex at the laser source 18. Consequently, Watanabe's "arrow" points away from the exit. The large end of the cone is at the exit sign or door 12, 19 (see Figs. 1-4 and 6).

Watanabe's design clearly teaches away from the applicants' invention because Watanabe's laser is mounted far away from the exit door as can be seen in all the drawings. This separation between the location of the laser and the location of the exit door prevents the laser from making a visible laser "cone" of the type claimed that points its "apex" towards the exit.

It is respectfully submitted that the application has now been brought into a condition where allowance of the entire case is proper. Reconsideration and issuance of a notice of allowance are respectfully solicited.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 2231301450.

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